Recommended Management Actions

DEM has already developed a basinwide plan for the Neuse River. Objectives of the plan include: 1) reducing springtime nitrogen inputs by 30%; 2) reducing annual phosphorus inputs by 50%; and 3) restricting total phosphorus levels in wastewater treatment plant discharges. The Falls Lake portion of the river basin is also considered nutrient sensitive and limits on phosphorus inputs have been set. With agriculture as the dominant land use in the basin, increased cost share funding for agricultural best management practices (BMPs) will be critical for the Neuse. Because of the high level of urban development in this basin, funding for nonagricultural BMP cost sharing will also be of critical importance. The additional controls of nonpoint source water pollution would reduce loadings of nutrients and toxics to the Neuse and reduce shellfish closures in the estuarine region of the basin, in addition to other benefits. In the South River area, where shellfish closures are of particular concern, nonpoint source controls would be targeted to reduce bacterial contamination. Enforcement of water quality standards would also help to ensure compliance with water quality standards.

The most important components of efforts to control toxic contamination in the Neuse basin include the continued assessment of the toxicity of sediments, fish tissues, and ambient water quality, especially in areas which are known to have elevated levels of toxicants. The Division of Environmental Management would evaluate potential sources of contamination using geographic information systems information on point source dischargers, nonpoint sources, and ambient water quality data. The plan would also expand basinwide goals for wetlands protection that recognize the importance of wetlands to the basinwide hydrology and water quality.

Core Sound/Bogue Sound Drainage Basin

Compared to the other drainage basins in the APES region, the waters of the Core-Bogue Sound drainage basin are clean and maintain relatively healthy estuarine habitats. The waters of Core Sound and portions of Bogue Sound have been designated as "Outstanding Resource Waters" because of exceptional water quality and recreational value. Overall, only about 7.6% of the waters of the Core-Bogue region are considered impaired. Nearly all of the water use impairment is attributed to bacterial (fecal coliform) contamination, with a small area of metal contamination in the Newport River. There are, however, some significant localized problems and indicators of water quality concerns in the basin. For instance, 25% of the waters of the Newport River only partially support their uses. From 1980 to 1990, closures of shellfish harvesting beds in the region increased by 54% to over 4000 acres. The region is also subject to frequent temporary shellfish closures following periods of heavy rainfall.

The major sources of impairment are pollution coming from urban and agricultural runoff, defective septic tanks, marinas, a state port, and waste water treatment plants. Nonpoint source pollution is responsible for approximately 80% of the area's impaired water quality. A great portion of this nonpoint source runoff comes from urban development where there is a high potential for stormwater to move rapidly into estuaries and sounds without adequate filtration. Urbanized areas in the region include Morehead City, Beaufort, and several areas of development along Bogue Banks from Atlantic Beach to Emerald Isle. There are a few